

## WORD Christchurch: Blue Sky Dreaming

We're already feeling the effects of a changing climate in Christchurch, in the form of hotter and drier summers, more intense storms and floods, and higher sea levels. These things will affect our homes, schools, parks, animals, neighbourhoods, and the way we live.

This sheet talks about the biggest climate risks in Christchurch, along with what they might mean for everyday life. Use these ideas to imagine what life could be like in 2125.

### **Biggest climate risks for Christchurch**

*Drought and heat:* More intense and frequent drought and more hot days (20+ days over 25 degrees Celsius compared with now) especially in inland areas and Banks Peninsula.

*Intense rainfall and landslides:* Heavier, more frequent rain will cause flash flooding in low-lying areas and landslides on steep hills.

*Sea level rise, coastal erosion, coastal flooding and rising groundwater:* In coastal areas sea levels could rise by at least 50 cm or more than 1 metre causing more coastal erosion, and more flooding during coastal storms or during high tides. The shoreline will move inland with some areas constantly underwater. Groundwater in low lying coastal areas will also rise, and could become close to the surface or stay around ponding in some areas.

### **What this could mean for everyday life**

Summers could be hotter and drier. Fires could occur more often and threaten houses, parks and trees. Rivers and streams may have less clear and clean water for fish, birds and recreational activities due to algae blooms and increased sediment. With the changes in seasonal temperature and flows, pests may flourish at the expense of native fauna and flora and soil fertility could be depleted. Farms may struggle to grow enough food or keep animals healthy. Drinking water may be harder to find in the summer.

Streets, parks and buildings may flood more often. Flooding may cause sewerage to overflow more regularly and drinking water may become contaminated. Stormwater drains may back up and cause water to pool and flood the streets. There may also be electricity, phone and internet services outages. Big rainstorms could cause slips that block roads, damage houses and infrastructure and fill our rivers with mud.

Some homes and roads near the coast may flood more often when there is a storm or high tide (or both) and the shoreline will move inland in some places as sea levels rise. Some small communities might lose road access when cliffs or beaches wash away. Beach and estuary habitats for plants and animals may get smaller as sea and groundwater levels rise and more flooding occurs. Long-term surface ponding can also impact on plants and can provide a breeding habitat for mosquitos. Stormwater drains may back up and cause water to pool and flood the streets. Sewerage may overflow more regularly, and drinking water may become contaminated.